Annals of Gastroenterology (2011) **24,** 122

Intrabiliary rupture of a hydatid cyst

Uri Kopylov[a], Sara Apter[b], Peretz Weiss[a]
Chaim Sheba Medical Center, Tel Hashomer, Israel

Hydatid disease is a parasitic zoonotic disease that still remains an important healthcare issue in many countries worldwide. Liver is the most common host of the hydatid cysts. The cyst may rupture into the bile duct, as occurs in 5-25% of cases [1]. This complication may be associated with acute cholangitis and life-threatening sepsis. Endoscopic retrograde cholangiopancreatography (ERCP) is the current diagnostic procedure of choice, enabling visualization of the fistula and drainage of the biliary tree [1]. MRI with magnetic resonance cholangiopancreatography (MRCP) offers noninvasive visualization of the biliary anatomy, with a sensitivity of 75-91.7% and specificity of 82.8-95% [2,3].

A 74-year-old man with longstanding hydatid disease was admitted to our hospital for prolonged fever, rigors and right upper quadrant abdominal pain associated with mild alkaline phosphatase and billirubin elevation. Leukocyte count was normal and multiple blood and urine cultures were negative. On admission, empirical treatment with ofloxacin, clindamycin and albendazole was initiated.

Figure 1 CT imaging of an infected echinococcal cyst in the liver. A sagittal contrast enhanced reformation image shows a well marginated cystic lesion in the liver, with a partially calcified rim and air bubbles within it(arrow).

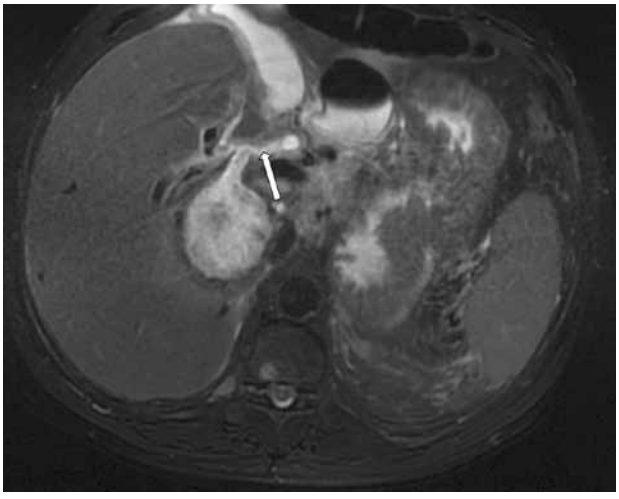

Figure 2 MRI of a fistula between the echinococcal cyst and the biliary tract. Axial fat-suppressed T2-weighted image shows the cystic lesion as demonstrated on the CT. A communicating tract is observed between the lesion and the right hepatic duct (arrow).

Abdominal CT showed several large intrahepatic and extrahepatic cystic lesions, some of them calcified. One of the cysts contained a few air bubbles [Fig 1]. MRI with MRCP demonstrated a communicating tract between the cyst and the right hepatic duct [Fig 2]. ERCP demonstrated a mild distention of the extrahepatic biliary ducts with no filling defects.

Following the procedure, the patient's fever and abdominal pain subsided with normalization of liver transaminase and alkaline phosphatase levels. The patient was discharged with a prolonged course of albendazole.

[a]Department of Gastroenterology (Uri Kopylov, Peretz Weiss);
[b]Department of Imaging (Sara Apter), Chaim Sheba Medical Center, Tel Hashomer, Israel

Conflict of Interest: None

Correspondence to: Uri Kopylov, MD,
Department of Gastroenterology, Chaim Sheba Medical Center,
Tel Hashomer, 52612 Israel;
Tel.: + 972 509004259;
Fax: 97235303160; e-mail: ukopylov@gmail.com

Received 4 March 2011; accepted 17 March 2011

References

1. Galati G, Sterpetti AV, Caputo M, et al. Endoscopic retrograde cholangiography for intrabiliary rupture of hydatid cyst. *Am J Surg* 2006;**191:**206-210.
2. Erden A, Ormeci N, Fitoz S, Erden I, Tanju S, Genç Y. Intrabiliary rupture of hepatic hydatid cysts: diagnostic accuracy of MR cholangiopancreatography. *AJR* 2007;**189:**W84-W89.
3. Hosch W, Stojkovic M, Janisch T, et al. MR imaging for diagnosing cysto-biliary fistulas in cystic echinococcosis. *Eur J Radiol* 2008;**66:**262-267.